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ABSTRACT

In the past about half of the newly hired teachers have been transfers (from another building, district, or state), with the others coming out of a reserve pool of education graduates who, for one reason or another, had never taught or had not taught recently. This study examines the supply side of the teacher labor market, especially those individuals who are not recent education graduates. School principals in six states (Alabama, Florida, Georgia, Mississippi, North and South Carolina) were randomly selected on a proportional basis to participate in the study. The respondents provided information pertaining to their school sites, new teachers in their school during the 1987-88 school year, the number of teachers teaching out of their fields of certification, the rate of teacher turnover in their schools, and their perceptions about teacher shortages and surpluses. A total of 475 principals responded, a 50% response rate. Data from the survey are displayed on tables with accompanying narrative discussion; a copy of the survey questionnaire is appended. (JD)

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Carolyn M. Cartledge and Stephen P. Halverson

Columbus College

August 1989

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THE SUPPLY SIDE OF THE TEACHER LABOR MARKET IN THE SOUTHEAST:

A Study of the Characteristics of Newly Hired Teachers and the Perceptions of Principals About Teacher Supply and Demand

EXECUTIVE SUMMARY

Stories abound about an existing or potential shortage of teachers, particularly in the Southeast. Few studies exist that describe the supply side of the teacher labor market, that is, exactly where newly hired teachers are coming from. Some previous studies have indicated that about half of all newly hired teachers are recent college graduates. Other studies have indicated a dwindling number of students enrolled in schools/colleges/departments of education, although these numbers have increased slightly recently. In the past, about half of the newly hired teachers have been transfers (from another building, district, or state), with the others coming out of a reserve pool of education graduates who, for one reason or another, have never taught or have not taught recently. The purpose of this study is to examine this supply side of the teacher labor market, especially those individuals who are not recent education graduates.

Principals play a major role in the hiring of new teachers in most schools. In an attempt to get a more precise picture of where newly hired teachers are coming from, 10 percent of the principals in the six southeastern states (i.e., Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina) were randomly selected on a proportional basis to participate in this study. Of the 947 principals receiving the instrument, 24.6 percent initially responded. Following two mailed postcard reminders and telephone calls to 5 percent of the nonrespondents, a second survey instrument with cover letter was

sent to all nonrespondents; their replies increased the response rate to 50.2 percent.

The respondents provided information pertaining to their school sites, new teachers in their school during the 1987-88 school year, the number of teachers teaching out of their field of certification, the rate of teacher turnover in their school, and their perceptions about teacher shortages and surpluses. A total of 475 principals responded: 95 from Alabama, 98 from Florida, 72 from Georgia, 48 from Mississippi, 106 from North Carolina, and 56 from South Carolina. Compared to the average response rate for all six states in the region, the response rate was much higher than the average for Alabama and lower for Florida and Georgia.

Differences in response rates by state produced concern about the generalizability of the results, so respondents and nonrespondents were compared on known school characteristics data. There were no significant differences between these samples on type of school (e.g., elementary), school location (e.g., rural, suburban), or number of teachers per school. However, student enrollments were significantly larger in the nonrespondent schools, and the results reported herein should not be generalized to large schools.

In the majority of the respondent schools, students were achieving at the third quartile, families had an average annual income of $7,000 to $15,999, parental involvement in the schools was moderate to low, and students were grouped by ability level.

The principals described 1,651 newly hired teachers in their schools. They indicated these new teachers were 82.8 percent white, 79.5 percent female, and 64.3 percent married; 47 percent were under the age of 30. Florida and Georgia hired the most new teachers per school; Alabama hired the fewest. Most

new hires were employed by suburban and urban schools. The fewest number were hired in isolated rural schools. These new teachers were primarily hired during the summer months and had 4.1 average years of prior teaching experience.

Only 30 percent of these newly hired teachers were recent graduates of a school/college/department of education program. Over 15 percent were re-entering teaching after spending time at home or in a nonteaching occupation. More than 43 percent were transferring from another building, another school district, or another state. These results, at least at the time of the study, imply that there is a deceasing percentage of newly hired teachers coming from the school/college/department of education "pipeline" and a greater reliance on the recruitment of new teachers from the reserve pool and through transfer from other schools, districts, or states.

Over 79 percent of the principals reported that no teachers in their schools were teaching out of their fields of certification. Only 13 principals (or 2.8 percent) reported having three or more teachers teaching out of their field(s) of certification. The largest percentage of out-of-field teachers reported in any state was in Florida, but this was less than 2 percent of the total teachers in those reporting schools. Isolated rural schools had the largest percentage of schools with out-of-field teachers; more than 25 percent of these schools had at least one teacher teaching out of field.

The respondents also reported the amount of teacher turnover in their respective schools. Out of 14,882 teachers in schools for which principals responded to this item, there were 376 resignations, 16 deaths, 485 transfers, 261 retirements, and 80 terminations. This resulted in an overall total teacher turnover rate of 8.18 percent, which is only slightly higher than the

turnover rate reported in previous studies. Turnover rates were lowest in suburban schools and highest in rural and isolated rural schools. These results had been found in previous studies as well, but the turnover rates in rural areas were more extreme than those previously reported. State average teacher turnover rates were lowest in Alabama and highest in Mississippi.

Seventy-five percent of the principals perceived that a teacher shortage is nonexistent or mild in their schools. Significant teacher shortages were reported primarily in special education, secondary math, secondary science, and foreign language. Principals in Mississippi perceived teacher shortages to be the most severe, and there were perceived teacher shortages in isolated rural schools around the region. More than 53 percent of the respondent principals perceived a mild or moderate teacher surplus, with this surplus mostly in early childhood and the middle grades.

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THE SUPPLY SIDE OF THE TEACHER LABOR MARKET IN THE SOUTHEAST:

A Study of the Characteristics of Newly Hired Teachers and the Perceptions of Principals About Teacher Supply and Demand

Introduction

The educational reform movement of the 1980s has placed public schools and, especially, the teaching profession, in the national spotlight. Reforms such as career ladder programs, merit pay programs, increased standards for entering the profession, additional high school graduation requirements, expanded curricula, and increased evaluation of current teachers have received considerable media coverage. These and other reforms have both positive and negative, direct and indirect effects on the supply of qualified teachers.

Coupled with new educational reform initiatives and increasing student enrollments, the nation has been bracing for a severe shortage of teachers. However, there is some disagreement at the national level about the validity of this concern. The Carnegie Foundation (1986) and National Education Association (1987) predict a shortage of between 66,000 and 72,000 teachers by 1991; the U.S. Bureau of Labor Statistics (Hecker, 1986) and the National Center for Education Information (Feistritzer, 1986) counter with figures that refute the likelihood of a shortage. Even so, both sides acknowledge that there are insufficient data for a thorough analysis and prediction of teacher supply.

By 1990, the National Center for Education Statistics will conduct a study to provide more information about the teacher labor market, working conditions of teachers, teacher turnover, teacher supply sources, and the qualifications of new teachers (Haggstrom, et al., 1988). Using instruments designed by the RAND Corporation and procedures implemented by the Census Bureau, the study is expected to provide the most complete information to date on the true extent of

the teacher shortage. In the meantime, state departments of education must assemble and analyze this kind of information.

Teacher supply is indicated by the number of people qualified and willing to accept teaching positions at current salary rates (Bird, 1985). Numerous factors are known to have an effect on this teacher supply. Appendix A lists some of these factors affecting the supply of teachers and cites the available literature that addresses each factor.

Because the existing supply of teachers is perceived by many to be inadequate, especially in the Southeast, public attention is beginning to focus on other sources of qualified educators. One possible source is those individuals who have either received formal teacher training, but never entered the teaching profession, or those who entered the profession and have since quit. This group may constitute a sizable, but limited, reserve pool of potential teachers. Few studies exist that describe the supply side of the teacher labor market, that is, exactly where newly hired teachers are coming from. The purpose of this study is to examine this supply side of the teacher labor market, especially those individuals who are not recent education graduates.

This study analyzes the supply side of the teacher labor market through information obtained from school building principals in six southeastern states: Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina. Specifically, this research attempts to determine: 1) the sources from which newly recruited teachers are being hired; 2) the amount of teacher turnover by state and geographical area; 3) the extent to which teachers are teaching out of their field of certification; and 4) whether teacher surpluses or shortages are perceived to exist by states, geographical areas, or content areas of teaching.

Method

Instrument

The survey instrument developed for this study included items related to the following categories: school characteristics, new teacher characteristics, and perceptions of teacher supply and demand in the school. All but two items required a simple check response or a frequency count based on local school data to complete the answers. The other two items requested that respondent principals record their perceptions of teacher shortages and surpluses in their schools, using defined terms of nonexistent, mild, moderate, or severe. A copy of the survey instrument is included in Appendix B.

Sample

Ten percent of the population of principals in six southeastern states was selected for the sample. Principals were selected because they are the persons who recruit and hire new teachers in most school districts. The principals for this study were identified by taking a proportional random sample from school directories provided by the state departments of education. The survey instrument was mailed to this selected sample of 947 principals in Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina during the last week of January 1988.

As an incentive to respond, a complimentary copy of What Works: Research on Teaching and Learning (1986), published by the United States Department of Education, was included in the mailing, along with a cover letter and the

survey form. A coded, prepaid mailer also was enclosed for convenience in returning the questionnaire. Numerical codes were used to identify responding principals for follow-up mailings and phone calls to nonrespondents. A toll-free telephone number was provided for use by respondents to seek answers to study-related questions.

The initial response rate was only 24.6 percent. Therefore, postcards were mailed to nonrespondents on February 17, 1988 and again on February 26, 1988 to encourage additional responses. Telephone calls were completed to 5 percent of these nonrespondents, with 98 percent of those called indicating that, if an additional questionnaire were provided, they would complete and return the questionnaire to the researchers. A second copy of the questionnaire, with a revised cover letter and without the complimentary book, was then mailed to each nonrespondent in the six states on March 11, 1988.

Through this second mailing, the response rate was increased to 50.2 percent. The sampling error generated at the 95 percent confidence level is 2 percent for this sample of 475 respondents, or 5 percent of the total population. Table 1 summarizes the sample and respondents by state.

As shown in Table 1, the response rate by state varies from lows of 41.1 and 41.3 percent, respectively, for Georgia and Florida respondents to a high of 67.4 percent for Alabama respondents. The differences in response rate resulted in a nonproportional response sample by state, since Alabama is greatly overrepresented in the respondent sample, while Florida and Georgia are underrepresented.

This difference in response rates produced concern about the representativeness of the respondents for the states involved and about the causes of the observed differences. Therefore, a separate analysis of nonrespondents was

Table 1
Principals Surveyed and Responding by State

State	Number Surveyed	Pct. of Total Surveyed	Number of Respondents	Pct. of Total Respondents	Response Rate
Alabama	141	14.8	95	20.0	67.4
Florida	237	25.0	98	20.6	41.3
Georgia	175	18.5	72	15.2	41.1
Mississippi	95	10.0	48	10.1	50.5
North Carolina	194	20.5	106	22.3	54.6
South Carolina	105	11.1	56	11.8	53.3
Totals	947		475		50.2

undertaken to determine whether there were known differences between respondents and nonrespondents on several readily available school variables. The results of this analysis are presented in the appropriate sections below. In summary, there were no significant differences on school location, percent of elementary schools, or number of teachers per school. There was a significant difference, however, between respondent and nonrespondent schools in student enrollments, with nonrespondent schools having larger enrollments. Therefore, the results of this study should not be generalized to schools with large student enrollments.

Some of the results (i.e., teacher out-of-field teaching rates and new teachers by school and location) of this study are presented as either mean results per respondent or as percentages, rather than frequencies, because simple frequency counts would have inflated the results for states with higher than average response rates.

School Characteristics Data

Following Coleman and Hoffer (1987), data were collected on school type (e.g., elementary, secondary), number of teachers, student enrollments, school location, student achievement level, per pupil expenditures, average family income level, frequency of participation in federal programs, level of parental involvement, and number of teachers teaching out of their field(s) of certification for each school.

School Type. There were varying grade levels reported for both elementary and secondary schools. For this study, schools that predominately contained prekindergarten through grade 6 were classified as elementary schools and schools that predominately contained grades 7 through 12 were classified as secondary schools. Because middle schools and junior high schools varied so much in the grades they encompassed, a middle school and/or junior high category was not feasible for this report. A few principals reported comprehensive schools having grades K-12. All high schools, comprehensive schools, middle schools, and junior high schools were included in a category of non-elementary schools.

Of the 471 principals who responded to this item, 265 (56.3 percent) were elementary principals, and 206 (43.7 percent) were nonelementary principals. Since 271 of the 479 nonrespondents (56.6 percent) were identified as elementary principals, and 208 (43.4 percent) are nonelementary, the respondent and nonrespondent populations compare favorably on school level.

School Location. Table 2 presents a breakdown of the location of both respondent and nonrespondent schools. About 60 percent of both types of school were located in a small city or in a rural location. Only about 20 percent were located in a suburban area or an isolated rural area. The remainder were

in urban locations. The differences in school location by respondent and nonrespondent groupings were not significant ($X^2 = 3.58$; df = 4).

Table 2
Frequency of School Locations by Response Group

School Location	Respondent Schools Number	Respondent Schools Percent	Nonrespondent Schools Number	Nonrespondent Schools Percent
Urban (city of over 100,000 people)	91	19.4	116	24.2
Suburban (within five miles of an urban area)	63	13.4	60	12.5
Small City (nonsuburban or urban city of more than 2,500 people)	164	34.9	161	33.6
Rural (town of fewer than 2,500 people within 35 miles of a city of over 15,000 people)	121	25.7	110	23.0
Isolated Rural (town of fewer than 2,500 people not within 35 miles of a city of over 15,000)	31	6.6	32	6.7
	N = 470		N = 479	

(5 respondents did not answer this item)

School Enrollments. Enrollments for about two-thirds of the respondent schools were from 250 to 750 students, as shown in Table 3. Only 11 schools in the respondent sample had enrollments above 1,500 students.

Table 4 presents comparable data for nonrespondent schools. Student enrollments in nonrespondent schools are clearly larger than in respondent schools. There are no respondent schools with more than 2,500 students, while there are four nonrespondent schools with more than 2,500 students. While more than 76 percent of the respondent schools have enrollments of under 751

students, only 59 percent of the nonrespondent schools had similar enrollments. A chi square test of these differences was highly significant ($X^2 = 40.62$; df=11; $p < .001$).

Table 3
Student Enrollment in Respondent Schools

Number of Students	Number of Schools	Percent of Schools	Number of Students	Number of Schools	Percent of Schools
1 - 250	56	11.8	1501 - 1750	5	1.1
251 - 500	164	34.6	1751 - 2000	2	0.4
501 - 750	143	30.2	2001 - 2250	2	0.4
751 - 1000	63	13.3	2251 - 2500	2	0.4
1001 - 1250	25	5.3	2501 - 3000	0	0.0
1250 - 1500	12	2.5	3001 & Above	0	0.0

Number of Respondent Schools = 474 (1 respondent did not answer this item)

Table 4
Student Enrollment in Nonrespondent Schools

Number of Students	Number of Schools	Percent of Schools	Number of Students	Number of Schools	Percent of Schools
1 - 250	35	7.3	1501 - 1750	20	4.2
251 - 500	127	26.5	1751 - 2000	4	0.8
501 - 750	122	25.5	2001 - 2250	5	1.0
751 - 1000	96	20.0	2251 - 2500	2	0.4
1001 - 1250	39	8.1	2501 - 3000	2	0.4
1250 - 1500	25	5.2	3001 & Above	2	0.4

Number of Nonrespondent Schools = 479

Number of Teachers. The number of teachers per school for respondents varied from 1 to 148, with an average of 34.9 teachers per school; the modal number of teachers per school was 35, and the median was 32. The number of teachers per school for nonrespondents varied from 1 to 188, with an average of 37.9 teachers; the modal number of teachers per school was 38, while the median was 33. The differences between the number of teachers in respondent and nonrespondent schools were small.

Student Achievement. The principals indicated the average achievement level of the students of the school by checking the appropriate quartile value on the survey form. The most frequently occurring quartile was the third, with over half of the responding principals indicating achievement at their schools averaging from the 51st to the 75th percentile on nationally standardized achievement test batteries. Table 5 indicates the average achievement levels reported by the 413 principals responding to this item.

Table 5
Average Achievement Levels of Students
on Nationally Standardized Achievement Test Batteries

Achievement Level	Number of Schools	Percent
First Quartile	21	5.1
Second Quartile	141	34.1
Third Quartile	214	51.8
Fourth Quartile	37	9.0
	n = 413	

(62 respondents did not answer this item)

Per Pupil Expenditures. The average per pupil expenditure amount was not reported by 310 of the respondents. Of the 168 responses, the average per pupil expenditure was $1,745, with a range of from $10 to $9,000. However, some of the principals reporting per pupil expenditures indicated state funds only, some reported on-site supply funds only, and others reported both state and on-site supply funds. Since these responses represent different interpretations of what the item was trying to ascertain, they were not used in any further statistical analyses.

Average Family Income. More than 60 percent of those principals responding, as indicated in Table 6, reported average family income levels below $16,000. More than half of the respondents indicated an average family income between $7,000 and $15,999.

Table 6
Average Family Income Level of the School

Family Income	Number of Schools	Percent	Cumulative Percent
$ 6,999 or less	41	9.2	9.2
$ 7,000 - $11,999	106	23.8	33.0
$12,000 - $15,999	123	27.6	60.5
$16,000 - $19,999	72	16.1	76.7
$20,000 - $24,999	48	10.8	87.4
$25,000 - $37,999	43	9.6	97.1
$38,000 or more	13	2.9	100.0

N = 446

(29 respondents did not answer this item)

Federal Programs. Principals identified 17 specific federal programs in which their schools were participating (Table 7). The most frequently mentioned federal program was the Title I Program for Economic Disadvantaged Children, followed by Title IV Library provisions and the Consumer and Homemaking provision of the Vocational Education Act.

Table 7
Frequency of Federal Programs

Program	Frequency	Percent
Title I Economic Disadvantaged	221	46.5
Title IVB Library	131	27.6
Title IVC Educational Innovation	16	3.4
Title IVD Supplementary Centers	21	4.4
Title VII Bilingual Education	29	6.1
Title IX Ethnic Heritage	8	1.7
Vocational Education Act 63 (VEA)		
Consumer and Homemaking	88	18.5
Basic Program	79	16.6
Persons with Special Needs	62	13.1
Cooperative Education	46	9.7
High School Work Study	47	9.9
Comprehensive Employment and Training Act	40	8.4
Upward Bound	23	4.8
Talent Search	29	6.1
Indian Education Act	15	3.2
Emerging School Aid Act - Desegregation	5	1.1
ROTC (Reserve Officers' Training Corps)	21	4.4
Others	40	8.4

Parental Involvement. Of the 468 principals responding to this item, 438 (93.6 percent) reported the parental involvement level in their schools to be moderate to low. Responses indicating parental involvement level are shown in Table 8.

Table 8
Parental Involvement Level

Level	Frequency	Percent
Low (25% or fewer participating parents)	211	45.1
Moderate (26%-74% participating parents)	227	48.5
High (75% or more participating parents)	30	6.4
	n = 468	

(7 respondents did not answer this item)

Student Ability Grouping. Of the 435 principals responding, 273 (62.8 percent) reported that students were grouped by ability level in their schools.

Results

In the following sections, the results of the survey of principals are presented in an effort to describe the characteristics of the supply side of the teacher labor market in the Southeast.

Number of New Teachers

According to the responses provided by principals, there were 1,651 new teachers hired for the 1987-88 school year in the 425 schools that reported hiring one or more new teachers. As indicated in Table 9, the number of new hires ranged from 145 new teachers in Mississippi to 487 new teachers in Florida. Because there was a differing number of responding principals for

Table 9
New Teachers by State

State	Number of Respondents	Number of New Hires	Average Number of New Hires per Respondent	Range of New Hires Reported
Alabama	95	236	2.48	0 - 13
Florida	98	487	4.97	0 - 16
Georgia	72	281	3.90	0 - 16
Mississippi	48	145	3.02	0 - 21
North Carolina	106	340	3.21	0 - 15
South Carolina	56	162	2.89	0 - 11
Totals/Averages	475	1,651	3.48	0 - 21

each state, a more meaningful figure is the average number of new hires by respondent within each state. These averages range from a low of 2.48 new hires per school in Alabama to a high of 4.97 new hires per school in Florida.

The number of new teachers by state and school location is shown in Table 10. The frequency count per cell is also shown. The means range from 1.11 new teachers for isolated rural schools in Alabama to 11.50 for urban schools in Mississippi. In general, suburban schools hired the most new teachers and small city and rural, especially isolated rural, schools hired the fewest.

Table 10
Average Number of New Teachers by Location and State

State	Location					
	Urban	Suburban	Small City	Rural	Isolated Rural	Average
Alabama	2.65 (17)	3.75 (8)	2.44 (34)	2.96 (23)	1.11 (9)	2.56 (91)
Florida	4.46 (37)	6.83 (18)	4.87 (30)	4.70 (10)	3.00 (2)	5.02 (97)
Georgia	3.62 (13)	3.82 (11)	4.00 (25)	4.05 (19)	5.00 (3)	3.96 (71)
Mississippi	11.50 (2)	5.57 (7)	1.73 (15)	2.44 (18)	2.75 (4)	3.02 (46)
N. Carolina	4.44 (18)	3.36 (11)	3.16 (37)	2.58 (31)	3.25 (8)	3.28 (105)
S. Carolina	3.67 (3)	4.50 (8)	2.20 (20)	2.94 (18)	3.20 (5)	2.94 (54)
Averages	4.12 (90)	4.87 (63)	3.20 (161)	3.10 (119)	2.71 (31)	3.54 (464)*

Note. Numbers in parentheses are number of respondents per cell.
*Eleven respondents who hired 4 new teachers, did not indicate either number of new hires or school location.

New Hire Characteristics

The responding principals described these newly hired teachers for the 1987-88 school according to the following characteristics: gender, age, ethnicity, and marital status. Table 11 presents the distributions of these characteristics among new hires. Most of these characteristics are typical of teacher characteristics in the Southeast. It should be noted that only about 17 percent of these teachers were minority teachers.

Table 11
Characteristics of New Hires

Age	Number of Teachers	Percent
20 - 29	769	47.0
30 - 39	572	34.9
40 - 49	232	14.2
50 and older	64	3.9
(452 respondents answered item)		

Marital Status	Number of Teachers	Percent
Married	1,030	64.3
Single	454	28.3
Divorced	108	6.7
Widowed	11	0.7
(447 respondents answered item)		

Sex	Number of Teachers	Percent
Female	1,301	79.5
Male	336	20.5
(452 respondents answered item)		

Ethnic Category	Number of Teachers	Percent
White	1,346	82.8
Black	253	15.6
Hispanic	21	1.3
Asian or Pacific Islander	2	0.1
American Indian/Alaskan Native	4	0.2
(448 respondents answered item)		

Respondents were asked to indicate the total years of previous teaching experience for each new teacher hired. Although most respondents indicated this figure separately for each new teacher, others reported a single figure, which could have been either an average or a total for all new teachers. Therefore, the reported 4.1 average years of previous teaching experience (median of 3.0 years) should be interpreted with caution.

Likewise, when respondents were asked to indicate the hiring date for each new teacher, some reported the hiring date separately for each teacher, while others reported the typical hiring date for the entire group of newly hired teachers. According to these results, 272 (77.5 percent) of the respondents reported hiring teachers primarily during the summer months of June, July, and August prior to the beginning of the school year, while 65 (18.5 percent) of the principals reported hiring their new teachers after the start of the school year, and only 14 (4.0 percent) principals reported hiring their new teachers prior to the end of the previous school year. For those principals indicating hiring dates for each new teacher, especially those with more new teachers, it generally was indicated that new teachers were hired during all three periods--before the end of the previous school year, during the summer vacation, and after the beginning of the new school year.

Teaching Certifications of New Hires

Respondents were asked to identify the areas of certification held by each of these newly hired teachers and whether or not these certificates were provisional. Table 12 indicates the number of certifications held by these new hires in each of the indicated teaching fields and shows the percent of these certifications that were provisional.

Table 12
Number of Teacher Certificates and Percent Provisional by Teaching Field for New Hires

Certification Type	Number of Certificates	Percent Provisional
Elementary	224	10.3
Early Childhood	163	10.4
Special Education	90	38.9
Middle Grades	54	11.1
Science	43	2.3
Social Studies	41	12.2
Physical Education	40	7.5
Math	40	12.5
English/Language Arts	39	17.9
Music	17	35.3
Reading	14	0.0
Business Education	13	7.7
Art	10	60.0
Vocational	7	14.3
Foreign Language	7	28.6
Agriculture	7	0.0
Home Economics	5	20.0
Guidance	5	40.0
Media/Library	3	33.3
Industrial Arts	1	100.0

Note. 823 total certifications were reported.

Although most respondents did indicate how many of each type of certificate were held by these newly hired teachers, some respondents only indicated areas of certification (without specifying how many new hires held each type) or did not respond at all. Therefore, these data are sketchy at best, but they do provide an overview of the general distribution of certificates held by newly hired teachers. Note that some newly hired teachers held multiple certificates.

Status of New Teachers the Year Prior to Assignment

According to 11 categories provided in the questionnaire, each new hire also was described according to what he/she was doing in the year prior to beginning the current school assignment. Table 13 shows the professional activities for 1,605 of the newly hired teachers for the year prior to beginning work in their current positions; however, several teachers reported more than one prior year's status.

Fewer than 30 percent of these new hires were new school/college/department of education graduates. Most of the rest of these new hires were transferring from another building in the same school district (18.9 percent) or transferring from another district within the same state (15.6 percent).

Teachers Teaching Out of Their Field of Certification

Over 79 percent of the responding principals indicated that there were no teachers teaching "out of their field of certification" at their schools; the average number of teachers working out-of-field was only 0.33 teacher per school.

Table 13
Status of New Teachers the Year Prior to Assignment

Status	Number of Teachers	Percent
Teacher Education Program	481	30.0
Another College Program	44	2.7
Teachers Aides	59	3.7
Substitute Teachers	90	5.6
Sabbatical Leave	12	0.7
Nonteaching Job	116	7.2
Reentered Teaching	137	8.5
Another Building/Same District	303	18.9
Different District/Same State	251	15.6
Different State	148	9.2
Something Other	50	3.1

Note. 1,691 prior-year statuses reported for 1,605 new teachers. (36 respondents having 46 new teachers did not answer this item)

Table 14 presents the numbers of teachers teaching out of their field(s) of certification per school. Each principal also indicated the percentage of total teachers that these out-of-field teachers represented. Those percentages ranged from 0 percent in 367 schools to 20 percent in one school, with a mean of .847 percent.

Table 14
Number of Teachers per School Reported To Be Teaching Out of Their Field of Certification

Number Per School	Frequency	Percent
0	372	79.1
1	59	12.6
2	26	5.5
3	8	1.7
4	3	0.6
5	2	0.4

(5 respondents did not answer this item)

The number and percentage of teachers by state reported to be teaching out of their field of certification are given in Table 15. An analysis of variance

Table 15
Number and Percent of Teachers by State Reported To Be Teaching Out of Their Field of Certification

State	Number of Schools	Number of Teachers	Number Teaching Out of Field	Percent Teaching Out of Field
Alabama	94	2,750	22	0.80
Florida	97	4,280	77	1.80
Georgia	71	2,480	15	0.60
Mississippi	48	1,403	11	0.78
North Carolina	104	3,401	18	0.53
South Carolina	55	1,904	14	0.74
Totals	469	16,218	157	0.97

(6 respondents did not answer these items)

of the differences between states on percent of teachers teaching out-of-field was significant ($F = 3.767$, $df = 5$ and 459, $p < .002$) indicating that there were significant differences among the states on the percentage of teachers in their classrooms who were teaching out of field.

The number of schools with teachers teaching out of their field(s) of certification was compared by school location as an indicator of teacher supply and demand. These results are presented in Table 16. A chi square computed for these data indicated no differences among locations on whether they had teachers teaching out of their field(s) of certification ($X^2 = 1.20$, $df=4$).

Table 16
Teachers Teaching Out of Their Field of Certification by School Location

Location	Schools With Out-of-Field Teachers		Percent of Schools With No Teachers Out of field	Total Number of Schools for each Location
	Pct. of Schools	No. of Teachers		
Urban	21.3	38	78.7	89
Suburban	19.0	21	81.0	63
Small City	19.1	51	80.9	162
Rural	22.3	35	77.7	121
Isolated Rural	26.7	11	73.3	30
Totals	20.9	157	79.1	465

(10 respondents did not answer one of these items)

Teacher Turnover

One section of the questionnaire requested teacher turnover data for the period from June 1, 1986 until September 10, 1987. These data were requested

by five categories of teacher turnover: resigned, transferred, deceased, retired, and terminated teachers. The 423 principals responding to this item reported that 376 teachers resigned, 485 transferred, 16 died, 261 retired, and 80 were terminated.

The regional teacher turnover rate for the 423 principals reporting both total number of teachers in their school and the total of the reasons for teacher turnover (i.e, termination, retirement, transfer) is 8.18 percent. Table 17 presents these teacher turnover rates by state, indicating the highest teacher turnover rate in Mississippi--primarily due to resignations and retirements. South Carolina had the lowest teacher turnover rates due to retirement, but the highest overall rate of terminations.

Table 17
Teacher Turnover Rates by State

	Number of Responding Schools	Percent Turnover By Reason					Totals
		Resigned	Transferred	Deceased	Retired	Terminated	
AL	83	1.78	3.04	0.16	2.03	0.20	7.21
FL	87	1.76	3.70	0.10	1.40	0.77	7.74
GA	67	3.25	3.33	0.13	1.58	0.30	8.59
MS	44	4.08	1.92	0.08	3.69	0.46	10.23
NC	97	2.67	3.58	0.06	1.60	0.56	8.48
SC	45	2.97	2.76	0.13	1.15	0.88	7.68
Totals	423	2.53	3.26	0.11	1.75	0.54	8.18
Total Number of Teachers*		376	485	16	261	80	1,218

(52 respondents did not answer these items)

*NOTE: This is the total number of teachers leaving for each reason. There were a total of 14,882 teachers in this sample.

Teacher turnover rates by school location are shown in Table 18 for the 418 schools represented by principals reporting both school location and reasons for turnover. Schools in rural and isolated rural areas had the highest turnover rates, and suburban schools had the lowest. Urban schools had the lowest rate of resignations and the highest rate of transfers.

Table 18
Teacher Turnover Rates by School Location

	Number of Responding Schools	Percent Turnover By Reason					Totals
		Resigned	Transferred	Deceased	Retired	Terminated	
Urban	80	1.70	3.67	0.06	1.94	0.58	7.96
Suburban	57	2.64	2.26	0.04	1.01	0.23	6.18
Small City	146	2.70	3.34	0.12	1.49	0.48	8.19
Rural	109	2.95	3.50	0.18	2.50	0.66	9.79
Isolated Rural	26	2.50	3.33	0.17	2.00	1.50	9.50
Totals	418	2.52	3.26	0.11	1.76	0.54	8.18
Total Number of Teachers*		373	483	16	260	80	1,212

(57 respondents did not answer these items)

*NOTE: This is the total number of teachers leaving for each reason. There were a total of 14,814 teachers in this sample.

Teacher Shortages

Principals' perceptions of teacher shortages in their schools, as shown in Table 19, consisted of their choice from the following alternatives:

- o Nonexistent (more applicants than needed).
- o Mild (some recruitment necessary in critical fields, all new hires certified or within one quarter/semester being certified).

- o Moderate (recruitment necessary in critical fields and some others; 10 percent or less of new hires not fully certified).
- o Severe (recruitment necessary for most fields; more than 10 percent of new hires not fully certified).

Table 19
Principals' Perceptions of Teacher Shortages in Their Schools

	Number of Respondents	Percent
Nonexistent	132	31.0
Mild	187	43.9
Moderate	89	20.9
Severe	18	4.2

(49 respondents did not answer this item)

About three-quarters of the principals responding to this item believed teacher shortages in their districts were either nonexistent or mild. Less than 5 percent believed there was a severe teacher shortage in their schools.

Teacher shortage responses by state are shown in Table 20. Shortages in Mississippi were perceived to be severe by about 12 percent of the respondents, and moderate by about 30 percent of the respondents in Florida, Georgia, and Mississippi. Almost 45 percent of the respondents in Alabama and about a third of the respondents in Georgia and North Carolina believe that there is no teacher shortage in their schools. These differences by state are significantly different ($X^2 = 42.296$, $df = 15$, $p < .001$).

Table 20
Teacher Shortage Responses by State

State	Number of Principals	Percent Indicating Responses Within Each State: Nonexistent	Mild	Moderate	Severe
Alabama	85	44.7	44.7	9.4	1.2
Florida	88	25.0	38.6	31.8	4.5
Georgia	65	35.4	32.3	29.2	3.1
Mississippi	42	11.9	47.6	28.6	11.9
North Carolina	97	33.0	47.4	16.5	3.1
South Carolina	49	24.5	57.1	12.2	6.1

(49 respondents did not answer this item)

Teacher shortage responses did not differ significantly by school location (X^2 = 17.445, df = 12, N.S.) as shown in Table 21. As expected, the most severe teacher shortages were perceived by principals in isolated rural schools, but moderate shortages were perceived in urban and rural schools.

Table 21
Teacher Shortage Responses by School Location

Location	Number of Schools	Percent Indicating Responses Within Each Location: Nonexistent	Mild	Moderate	Severe
Urban	81	35.8	35.8	23.5	4.9
Suburban	59	35.6	40.7	18.6	5.1
Small City	149	28.2	50.3	19.5	2.0
Rural	108	29.6	43.5	24.1	2.8
Isolated Rural	25	32.0	40.0	12.0	16.0

(53 respondents did not answer one or both of these items)

The principals indicated the specific teaching fields in which they perceived the existence of a teacher shortage. More than 100 principals indicated the existence of a teacher shortage in each of the following fields: secondary science, secondary math, foreign language, and special education. Fewer than 20 percent of the principals indicated shortages in early childhood, middle grades, and other fields. Table 22 shows the number of principals indicating the presence of a teacher shortage in specific fields.

Table 22
Perceived Teacher Shortages by Field

Teaching Field	Number of Respondents	Percent
Special Education	195	45.9
Secondary Math	145	34.0
Secondary Science	135	31.7
Foreign Language	104	24.4
Middle Grades	72	16.9
Early Childhood	42	9.9
Other Fields	42	9.9

(49 respondents did not answer these items)

Teacher Surpluses

Respondents also were asked about their perceptions of teacher surpluses in their schools. Their responses, as shown in Table 23, were based on the following definitions of a teacher surplus:

- o Nonexistent (recruitment necessary with more than 10 percent of new hires not fully certified).
- o Mild (recruitment necessary in critical fields and some others; 10 percent of new hires not fully certified).
- o Moderate (some recruitment necessary in critical fields; all new hires certified or within one quarter/semester being certified).
- o Severe (more applicants than needed).

Table 23
Principals' Perceptions of Teacher Surpluses in Their Schools

	Number of Respondents	Percent
Nonexistent	127	30.5
Mild	92	22.1
Moderate	129	31.0
Severe	68	16.3
(49 respondents did not answer this item)		

In comparison to their perceptions of teacher shortages (Table 19), principals perceived that both a teacher shortage and a teacher surplus exist to about the same degree. However, where there was perceived to be a shortage or a surplus, the surpluses were perceived to be more moderate or severe.

The teacher surplus responses by state are shown in Table 24. The differences between states in perception of teacher surpluses approached statistical significance ($X^2 = 23.873$, $df = 15$, $p < .067$).

Table 24
Teacher Surplus Responses by State

State	Number of Principals	Percent Indicating Responses Within Each State: Nonexistent	Mild	Moderate	Severe
Alabama	74	31.1	18.9	28.4	21.6
Florida	90	36.7	24.4	30.0	8.9
Georgia	66	25.8	19.7	31.8	22.7
Mississippi	42	40.5	26.2	33.3	0.0
North Carolina	97	24.7	23.7	27.8	23.7
South Carolina	47	27.7	19.1	40.4	12.8

(59 respondents did not answer this item)

Principals' responses about teacher surpluses by school location as shown in Table 25 also were not significant (X^2 = 13.788, df = 12). Fewer teacher surpluses were perceived to occur in the 26 isolated rural schools.

Table 25
Teacher Surplus Responses by School Location

Location	Number of Schools	Percent Indicating Response Within Each Location: Nonexistent	Mild	Moderate	Severe
Urban	80	32.5	22.5	27.5	17.5
Suburban	57	29.8	14.0	33.3	22.8
Small City	144	24.3	24.3	34.7	16.7
Rural	106	33.0	21.7	31.1	14.2
Isolated Rural	26	50.0	26.9	15.4	7.7

(62 respondents did not answer this item)

The principals indicated the specific teaching fields in which they perceived a teacher surplus to exist. More than 100 principals indicated a teacher surplus in early childhood and middle grades. However, fewer than 35 principals indicated a teacher surplus in secondary science, secondary math, foreign language, special education, and other teaching fields. Table 26 indicates the frequency of responses by teaching fields according to principals' perceptions of a teacher surplus.

Table 26
Perceptions of Teacher Surplus by Teaching Field

Teaching Field	Number of Respondents	Percent
Early Childhood	170	78.7
Middle Grades	115	53.2
Special Education	24	11.1
Secondary Science	15	6.9
Secondary Math	12	5.6
Foreign Language	11	5.1
Other Teaching Fields	33	15.3

(59 respondents did not answer these items)

Discussion

The 50.2 percent response rate for this survey, with a 2 percent sampling error at the 95 percent confidence level, represents a disappointing return rate from the 947 surveys sent. However, based on an analysis of the characteristics of the schools of both the responding and nonresponding principals, the respondent and nonrespondent groups appear to be similar enough to provide for generalizability of the study findings, except to schools that have large student populations.

The principals described 1,651 newly hired teachers and indicated that these new teachers were 82.8 percent white, 79.5 percent female, and 64.3 percent married; 47 percent were between the ages of 20 and 29. The new hires included about the same percentage of females as the 79.8 percent reported by the National Education Association for these states during the 1986-87 school year and considerably more than the 70.3 percent national average reported for that same year (NEA, 1987).

Currently, minority teachers make up 24 percent of the total teaching population in the Southeast as reported for the 1986-87 school year (Bird, 1989). The finding in this study that only 17.2 percent of the new hires were minorities reinforces the perception of a continued need for the active recruitment of minorities into the teaching profession. Such recruitment will be necessary to avoid having a growing minority student population taught by an increasingly white teaching force.

Age was reported by 10-year ranges in this study; therefore, these results cannot be compared directly with the results of other studies reporting average

teacher age. However, even when reported as age ranges, the average age of these new hires is obviously less than the average age of 39.5 years reported for teachers in the Southeast in 1986-87 (Bird, 1989). This lower average age is not surprising, since a significant proportion of these new hires were recent college graduates. Therefore, the new hires described in this study according to gender, race, and age were younger and represented a smaller proportion of minorities than the general teacher population in the region during the 1986-87 school year.

The respondents indicated the professional activities of these new hires during the year prior to their being hired. Only 30 percent of these new hires were new school/college/department of education graduates. This is considerably fewer than typically found in previous studies, where about 50 percent of new teachers were recent college graduates (Bird et al., 1985). This means that an additional 20 percent of the new hires (when compared to previous studies) are either transfers or coming out of the reserve pool of teachers (certified teachers not currently teaching). Since there is a finite supply of teachers who can transfer, an increasing number of new hires will have to come out of the reserve pool if the pool of recent college graduates does not increase to meet this additional demand.

Of these new hires, 43.7 percent were transfers (from another building in the same district, from another district in the same state, or from a different state), 15.7 percent were reentering teaching or changing from a nonteaching job, and 9.3 percent had been substitute teachers or teacher aides during the previous school year. These results tend to support literature cited in Appendix A indicating that there is a shortfall of prospective teachers "in the pipeline" (i.e., enrolled in teacher education programs) to serve as the

primary teacher supply source in filling vacant positions in these southeastern states. However, several studies subsequent to this research have indicated that the number of prospective teachers "in the pipeline" may be increasing (American Council on Education, 1989; American Association of Colleges for Teacher Education, 1989).

The teacher turnover reported by respondents in their respective schools was 8.18 percent, which is slightly higher than the 8.03 percent teacher turnover rate reported by Bird in 1985. While the urban teacher turnover rate reported herein decreased by almost a full percentage point, the rural teacher turnover rates were more than three percentage points higher.

Principals' perceptions of teacher shortages were lower than anticipated, especially in rural and isolated rural schools. Seventy-five percent of the principals indicated that a teacher shortage is nonexistent or mild, with significant shortages perceived to exist only in the fields of secondary math, secondary science, special education, and foreign language. More than 50 percent of the respondents perceived a teacher surplus to be mild or moderate, particularly in the fields of early childhood and the middle grades. Although perceptions of teacher shortages or surpluses did not differ significantly by school location (i.e., urban, suburban, small city, rural, and isolated rural), they did differ significantly by state. Shortages were perceived to be most severe in Mississippi and South Carolina and were especially severe in isolated rural schools across all states in the region.

Conclusions

Teacher shortages, as predicted by Norris (1985) and numerous others (see Appendix A), may not yet occurred. Some of the factors likely to continue affecting the supply and demand of teachers in the Southeast include teacher turnover; the inability of school districts and states to attract and retain qualified teachers; the increased use of teachers teaching out of their field(s) of certification, using emergency teacher certificates, and pursuing alternative routes to teacher certification; the large numbers of retirements expected in the 1990s; the increase of pecuniary and nonpecuniary rewards for teaching; and the improvement in teacher salaries and working conditions.

Other factors that portend future teacher shortages include the decrease in the number of recent college of education graduates as a percentage of the total teacher labor pool and increased demands for new teachers brought about by the implementation of new educational reform initiatives requiring additional teachers (e.g., lower teacher/student ratios, additional graduation requirements). The increases created by new educational reform efforts may at least partially explain why in this study, although the average teacher turnover rate was about 8 percent in each school, the average number of new hires within each school was about 10 percent of the total number of teachers in sample schools. As indicated by Bird (1985), the teacher supply continues to be difficult to predict.

Prospective teachers must be attracted at the career entry point to prevent a teacher shortage (Bird, 1985). Career planning and placement

counselors can make a contribution by making lower division college students aware of the availability of jobs in specific teaching fields (Anthony, 1986).

Feistritzer (cited in Phi Delta Kappan, 1987) may be correct in her assertion that, for now, overall teacher supply is keeping up with the demand, except in the critical shortage fields of math, science, special education, and foreign language. Indeed, recent studies have indicated an increase in enrollments in schools/colleges/departments of education (American Council on Education, 1989; American Association of Colleges for Teacher Education, 1989). However, a simple solution to problems encountered in the teacher labor market does not exist (Berry, 1986).

Recruiting new teachers into the teaching profession seems essential. Unlike their passive recruitment practices of the past, school administrators and teacher recruiters in urban areas cannot continue to rely on filling teaching positions with spouses brought to the area by employment relocations. This situation has been created, at least in part, by the expansion of alternative job opportunities for women. Moreover, rural areas can no longer expect college graduates to return home as employment opportunities become less attractive in these rural areas.

Recruitment into the teaching profession must begin at the high school level or earlier through the identification and encouragement of capable students to enter the profession. The profession itself must be made more attractive by maximizing the time teachers teach, improving working conditions, and actively recruiting qualified teachers from the reserve pool (Berry, 1986; Edelfelt, 1986; Hawley, 1986).

Concerted efforts must be maintained to fill teaching vacancies with qualified teachers in the critical shortage fields of special education,

mathematics, science, and foreign language. The apparent surplus at this time of early childhood teachers may be shortlived, since several recent educational reform efforts have been directed toward providing more early childhood education programs. Teachers in other teacher surplus areas may need to be retrained, especially in the various certification areas of special education (e.g., learning disabled, emotionally handicapped, mentally handicapped), to meet the immediate needs for such classes in all six of the southeastern states. Personnel could be recruited at the district level, where surpluses exist, and be encouraged through district-paid coursework to seek additional areas of certification.

References

American Association of Colleges for Teacher Education [AACTE]. (1989). Research about teacher eEducation. Third annual report. Washington, DC: Author.

American Council on Education [ACE]. (1989). The American freshman: National norms for fall 1988. Sponsored by the American Council on Education. Los Angeles, CA: Higher Education Research Institute.

Anthony, R. (1986). Wanted: Teachers. Journal of Career Planning and Employment, 46, 37-39.

Berry, B. (1986). A case study of the teacher labor market in the Southeast: Miss Dove is alive and well (and teaching math, sponsoring the yearbook, and coaching softball). Occasional Papers in Educational Policy Analysis, No. 413. Research Triangle Park, NC: Southeastern Regional Council for Educational Improvement. (ERIC Document Reproduction Service No. ED 017 378).

Bird, R. E. (1985). An analysis of the comparability of public school teacher salaries to earning opportunities in other occupations. Occasional Papers in Educational Policy Analysis, No. 415. Research Triangle Park, NC: Southeastern Regional Council for Educational Improvement. (ERIC Document Reproduction Service No. ED 256 070)

Bird, R. E. (1989). An analysis of the comparability of teacher salaries to the earnings of other college graduates in the Southeast: 1988 update. Research Triangle Park, NC: Southeastern Educational Improvement Laboratory. (ERIC Document Reproduction Service No. ED 256 070)

Carnegie Foundation for the Advancement of Teaching. (1986). Future teachers: Will there be enough good ones? Change, 18, 27-30.

Coleman, J.S. and Hoffer, T. (1987). Public and private schools. NY: Basic Books.

Edelfelt, R. (1986). Managing teacher supply and demand. Action in Teacher Education, 8, 31-36.

Feistritzer, C.E. (1986). Teacher crisis: Myth or reality. Washington, DC: National Center for Education Information, December 8, 1986.

Haggstrom, G.W., Darling-Hammond, L., and Grissmer, D. (1988). Assessing teacher supply and demand. Washington, DC: The RAND Corporation.

Hawley, W.D. (1986). Toward a comprehensive strategy for addressing the teacher shortage. Phi Delta Kappan, 712-718.

Hecker, D. (1986). Teacher's job outlook: Is Chicken Little wrong again? Occupational Outlook Quarterly, Winter 1986.

National Education Association [NEA]. (1987). Estimates of school statistics. Washington, DC: Author.

Norris, B. (1985). Sun seekers add to the shortage problem. The New York Times Education Supplement, January 11, 1985, p. 14.

Staff. (1987). Controversial report says teacher supply keeping pace with demand. Phi Delta Kappan, 479-480.

U.S. Department of Education (1986). What works: Research about teaching and learning. Washington, DC: Author.

Appendix A

Factors Affecting Teacher Supply

Appendix A

Factors affecting teacher supply

Numerous factors are known to have an effect on teacher supply. While the present study does not address the degree to which these factors operate in the Southeast, future research should explore them in order to gain better insight into the complexity of teacher supply in this region. This appendix lists the factors that affect teacher supply and cites the available literature that deals with each factor.

	Factor	Relevant Literature
1.	Administrative flexibility	South Carolina Department of Education (1986)
2.	Administrative preferences for experienced and or inexperienced teachers	Berry (1986) South Carolina Department of Education (1985)
3.	Admissions standards for for teacher education	Anrig, Goertz, and McNeil (1986) Barnes, Bass and Wakeford (1986)
4.	Aging teaching profession	Anthony (1986) Culver, Eicher, and Sacks (1986) Empey (1984) South Carolina Department of Education (1985) Watts (1986)
5.	Decrease in 18- to 21-year-olds to enter the profession	Culver, Eicher, and Sacks (1986)
6.	Decrease in minorities	Anthony (1986)
7.	Employment preferences of teachers	Berry (1986) South Carolina Department of Education (1985)

8.	Increased certification requirements	Anrig, Goertz, and McNeil (1986) Barnes, Bass, and Wakeford (1986) Bruno and Marcoulides (1985) Culver, Eicher, and Sacks (1986)
9.	Increased student enrollments	Anthony (1986) Barnes, Bass, and Wakeford (1986) South Carolina Department of Education (1986) Watts (1986)
10.	Increased immigration	Anthony (1986)
11.	Integration	Berry (1986)
12.	Lack of interest shown by high school students	Berry (1986) Anthony (1986) Berry, McCormick, and Buxton (1989) Berry, Noblit, and Hare (1985)
13.	Lack of job market information	Anrig, Goertz, and McNeil (1986)
14.	Lack of professional respect	Empey (1984) Ferris and Winkler (1986) Kleiman (1988)
15.	Lack of recruitment	Berry (1986) Berry, Noblit, and Hare (1985) Bird et al. (1985)
16.	Low entry rate of new graduates	Anthony (1986) Barnes, Bass, and Wakeford (1986)
17.	Low salaries	Anthony (1986) Bird (1985, 1988, 1989) Bird et al. (1985) Bird and Wakeman (1986) Empey (1984) Ferris and Winkler (1986) Kleiman (1988) Watts (1986)
18.	Poor working conditions	Berry, Noblit, and Hare (1985) Ferris and Winkler (1986) Kleiman (1988) Watts (1986)
19.	Population migration	Anthony (1986)

20.	Size of reserve pool	Barnes, Bass, and Wakeford (1986) Berry (1986) Empey (1984) South Carolina Department of Education (1985 & 1986)
21.	Teacher mobility	Barnes, Bass, and Wakeford (1986) Berry (1986) Bird et al. (1985) South Carolina Department of Education (1985)
22.	Teacher turnover	Anthony (1986) Barnes, Bass, and Wakeford (1986) Berry, Noblit, and Hare (1985) Bird et al. (1985) Empey (1984) South Carolina Department of Education (1986)
23.	Women entering other careers	Anthony (1986) Empey (1984) Maryland State Department of Education and the Maryland State Board of Higher Education (1986)

References

Anrig, G. R., Goertz, M. E., and McNeil, R. C. (1986). Teacher competency testing: Realities of supply and demand in this period of educational reform. Journal of Negro Education, 55(3), 316-325.

Anthony, R. (1986). Wanted: Teachers. Journal of Career Planning and Employment, 46, 37-39.

Barnes, G. T., Bass, C. C., and Wakeford, M. E. (1986). Teacher supply and demand in North Carolina public schools. Chapel Hill, NC: University of North Carolina Task Force on the Preparation of Teachers.

Berry, B. (1986). A case study of the teacher labor market in the Southeast: Miss Dove is alive and well (and teaching math, sponsoring the yearbook, and coaching softball). Occasional Papers in Educational Policy Analysis, No. 413. Research Triangle Park, NC: Southeastern Regional Council for Educational Improvement. (ERIC Document Reproduction Service No. ED 017 378)

Berry, B., McCormick, C., and Buxton, T. (1989). Recruiting the next generation of teachers: Conversations with high school sophomores. Research Report No. 08-005. Research Triangle Park, NC: Southeastern Educational Improvement Laboratory.

Berry, B., Noblit, G. W., and Hare, R. D. (1985). A qualitative critique of teacher labor market studies. The Urban Review, 17(2), 98-110.

Bird, R. E. (1985). An analysis of the comparability of public school teacher salaries to earning opportunities in other occupations. Occasional Papers in Educational Policy Analysis, No. 415. Research Triangle Park, NC: Southeastern Regional Council for Educational Improvement. (ERIC Document Reproduction Service No. ED 256 070)

Bird, R. E. (1988). An analysis of the comparability of teacher salaries to the earnings of other college graduates in the Southeast: 1987 update. Research Triangle Park, NC: Research Report No. 07-010. Research Triangle Park, NC: Southeastern Educational Improvement Laboratory. (ERIC Document Reproduction Service No. ED 285 843)

Bird, R. E. (1989). An analysis of the comparability of teacher salaries to the earnings of other college graduates in the Southeast: 1988 update. Research Triangle Park, NC: Southeastern Educational Improvement Laboratory.

Bird, R. E., Berry, B. Douglas, S., and Sciscento, S. (1985). The dynamics of the teacher labor market in the Southeast. Research Report No. 07-003. Research Triangle Park, NC: Southeastern Educational Improvement Laboratory. (ERIC Document Reproduction Service No. ED 269 393)

Bird, R. E. and Wakeman, D. (1986). An analysis of the comparability of teacher salaries to the earnings of other college graduates in the Southeast: 1986 update. Research Triangle Park, NC: Southeastern Educational Improvement Laboratory.

Bruno, J. E., and Marcoulides, G. A. (1985). Equality of educational opportunity at racially isolated schools: Balancing the need for teacher certification with teacher shortage. The Urban Review, 17(3), 155-165.

Culver, V. I., Eicher, R. K., and Sacks, A. L. (1986). Confronting the teacher shortage: Are alternative certification programs the answer? Action in Teacher Education, 8, 19-23.

Empey, E. W. (1984). The greatest risk: Who will teach? The Elementary School Journal, 85(2), 167-176.

Ferris, J., and Winkler, D. (1986). Teacher compensation and the supply of teachers. The Elementary School Journal, 86, 383-403.

Kleiman, C. (1988). Big shortage of teachers is expected. The Sunday Ledger-Enquirer (Columbus, GA), January 18, 1988, p. D2.

Maryland State Department of Education and the Maryland State Board for Higher Education. (1986). Teacher supply and demand in Maryland. Baltimore, MD: Author. (ERIC Document Reproduction Service No. ED 275 698)

South Carolina Department of Education (1985). Teacher supply and demand for South Carolina public schools: An initial analysis. Columbia, SC: Author.

South Carolina Department of Education. (1986). Teacher supply and demand for South Carolina public schools. Columbia, SC: Author.

Watts, G. D. (1986). And let the air out of the volleyballs. Phi Delta Kappan, 68, 723-724.

Appendix B

Cover Letters and Questionnaire

Columbus College

Columbus, Georgia 31993-2399

January 29, 1988

Dear Principals:

We are writing to enlist your help on a study of teacher supply and demand in the Southeast (i.e., Alabama, Georgia, Florida, Mississippi, North Carolina, and South Carolina). This study is funded by the Southeastern Educational Improvement Laboratory as part of its effort to improve education in the region.

Enclosed is a three page questionnaire which includes items about your school, your perceptions of teacher supply in specific fields, and the characteristics of new teachers in your school. This survey is being sent to ten percent of the principals in the six southeastern states. Responses will not be identified by name.

Because your response is so important to us, we are also enclosing a complimentary copy of the second edition of What Works: Research on Teaching and Learning (1987) by the U.S. Department of Education. In appreciation of a prompt response, a summary of our report will be sent to respondents sometime in the late spring.

Please complete the questionnaire and return it to us in the enclosed prepaid mailer by February 12, 1988. A toll free number is available should you have questions about the questionnaire or any other aspect of our work. The number is 1-800-426-3716.

Thank you for your assistance.

Sincerely,

Carolyn M. Cartledge, Ed.D.
Project Director

Stephen P. Halverson, Ed.D.
Project Co-Director

CMC/SPH:df

Columbus College is a Unit of the University System of Georgia

Columbus College

School of Education
Department of Educational Foundations
Columbus, Georgia 31993-2399
(404) 568-2250

March 2, 1988

Dear Principal:

Enclosed is a three page questionnaire which includes items about your school, your perceptions of teacher supply in specific fields, and the characteristics of new teachers in your school, which was originally sent to you about a month ago along with a complimentary copy of the second edition of What Works: Research About Teaching and Learning (1987). We asked for your help on a study of teacher supply and demand in the Southeast funded by the Southeastern Educational Improvement Laboratory as a part of its effort to improve education in the region.

As is often the case, the return rate is lower than we would like; therefore, please complete the questionnaire and return it to us in the enclosed prepaid mailer as soon as possible. A toll free number is available should you have questions about the questionnaire or any other aspect of our work. The number is 1-800-426-3716.

Thank you for your assistance.

Sincerely,

Carolyn M. Cartledge, Ed.D.
Project Director

CMC:df

Please take a few minutes to complete each of the following items.

Section I: School Characteristics Data

School Size

Number of Students _____ Grade Levels _____

Number of Teachers _____

School Location (✓ one response.)

Urban (city of over 100,000 population) _____

Suburban (within five miles of an urban area) _____

Small City (non-suburban or urban city of more than 2500 people) _____

Rural (town of less than 2500 people within 35 miles of a city of over 15,000 people) _____

Isolated rural (town of less than 2500 people not within 35 miles of a city of over 15,000 people) _____

Site Characteristics* for Your Building Only

Annual Per Pupil Expenditure _____

Average Family Income Level (✓ one response.)

$ 6,999 or less _____

$ 7,000 - $11,999 _____

$12,000 - $15,999 _____

$16,000 - $19,999 _____

$20,000 - $24,999 _____

$25,000 - $37,999 _____

$38,000 or more _____

Use of Ability Grouping (Circle one response.) Yes No

Parental Involvement Level (✓ one response.)

Low (25% or less participating parents) _____

Moderate (26%-74% participating parents) _____

High (75% or more participating parents) _____

Number of teaching positions filled this year with teachers out of their field of certification _____

Percent of total number of positions filled by out-of-certification teachers _____

Federal Programs in Operation (✓ all applicable programs.)

Education Act

Title I Economic Disadvantaged _____

IVB Library _____

IVC Educational Innovation _____

IVD Supplementary Centers _____

VII Bilingual Education _____

IX Ethnic Heritage _____

Vocational Education Act 63 VEA

Consumer and Homemaking _____

Basic Program _____

Persons with Special Needs _____

Cooperative Education _____

High School Work Study _____

Comprehensive Employment and Training Act (CETA) _____

Upward Bound _____

Talent Search _____

Indian Education Act _____

Emerging School Aid Act-Desegregation _____

ROTC _____

Other (specify) _____

_____

_____

Average Achievement Level of Students on Nationally Normed Tests (✓ one response.)

First Quartile (1st - 25th percentile) _____

Second Quartile (26th - 50th percentile) _____

Third Quartile (51st - 75th percentile) _____

Fourth Quartile (76th - 99th percentile) _____

Section II: New Teacher Characteristics (in this school) for the Current School Year

Number of New Teachers in Your School Who Last Year Were:

_____ Students in a Teacher Education Program

_____ Students in Another College Program

_____ Teacher Aides

_____ Substitute Teachers

_____ On Sabbatical Leave

_____ Doing something other than teaching since graduating from college; number of years of delayed entry for each: _____

_____ Doing something other than the above, but re-entered teaching this year

_____ Teaching in another building within this school district; reasons for transfer: _____

_____

_____ Teaching in a different district within the state; reasons for relocation: _____

_____

_____ Teaching in a different state; reasons for relocation:

_____

_____ Other; specify: _____

_____

_____ Total Number of New Teachers

Hire Date for Each New Teacher

_____

_____

_____

Characteristics of New Teachers Only
Gender: Number of Males _____ Number of Females _____

Age (Indicate number for each.)

20 - 29 _____ 40 - 49 _____

30 - 39 _____ 50 and older _____

Ethnicity (Indicate number for each.)

White (not of Hispanic origin) _____

Black (not of Hispanic origin) _____

Hispanic _____

Asian or Pacific Islander _____

American Indian or Alaskan Native _____

Marital Status (Indicate number for each.)

Single _____ Widowed _____

Divorced _____ Married _____

Certification Status (Indicate teaching field area and certification type for each new teacher and circle those certifications shown in the list that are provisional or probationary.)

_____

_____

_____

_____

Total Years Previous Teaching Experience (excluding current year) for Each New Teacher.

_____

_____

_____

Teacher Turnover (from June 1, 1986 to September 10, 1987)

Number Resigned _____ Number Retired _____

Number Transferred _____ Number Terminated (for other reasons) _____

Number Deceased _____

Section III: Perceptions of Teacher Supply and Demand in Your School

Teacher Shortage Areas (✓ one response.)

The teacher shortage is

nonexistent (more applicants than needed) _____.

mild (some recruitment necessary in critical fields; all new hires certified or within one quarter/semester being certified) _____.

moderate (recruitment necessary in critical fields and some others; 10% or less of new hires not fully certified) _____.

severe (recruitment necessary for most fields; more than 10% of new hires not fully certified) _____.

The teacher shortage exists in each of the following teaching fields: (✓ as many as applicable.)

Early Childhood (K - 3) _____

Middle Grades (4 - 8) _____

Secondary

Science _____

Mathematics _____

Foreign Language _____

Special Education _____

Other (specify) _____

_____

_____

_____

Teacher Surplus Areas in Your Building (✓ one response.)

A teacher surplus for my school building is

nonexistent (recruitment necessary with more than 10% of new hires not fully certified) _____.

mild (recruitment necessary in critical fields and some others; 10% or less of new hires not fully certified) _____.

moderate (some recruitment necessary in critical fields; all new hires certified or within one quarter/semester being certified) _____.

severe (more applicants than needed) _____.

A teacher surplus exists in each of the following teaching fields: (✓ as many as applicable.)

Early Childhood (K - 3) _____

Middle Grades (4 - 8) _____

Secondary

Science _____

Mathematics _____

Foreign Language _____

Special Education _____

Other (specify) _____

_____

_____

_____

Return the completed questionnaire to

Department of Educational Foundations
Columbus College
Columbus, GA 31993-2399

*As reported in
Coleman, J. S., and Hoffer, T. (1987). Public and private high schools. New York: Basic Books.